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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP
100 GALLERIA PARKWAY, NW
STE 1750
ATLANTA, GA 30339-5948

EXAMINER	
USTARIS, JOSEPH G	

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2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/771,783	Applicant(s) WANG ET AL.	
	Examiner Joseph G Ustaris	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-10 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-10 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 29 January 2001 is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because Fig. 1 label "S_1" should be labeled as "CS_1" in order to be consistent with the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

- On page 3 line 34, --fig.ure-- should replaced with "figure".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gudesen (5,761,607) in view of Lang (4,963,995).

Regarding claim 1, Gudesen discloses a decoder box or "video box" used within a VOD system (See Fig. 1b and column 6 lines 5-11). The decoder box is able to receive "input signals transmitted via a cable TV system" (See Fig. 1b elements 101 and 102; column 5 lines 53-65). The "input signals" contains desired information or data, i.e. films or "program signals" (See column 5 lines 53-65). The decoder box further includes a "storage device" that can store the films or "program signals" in coded or "compressed" or uncoded or "decompressed" form (See Fig. 1b element 201; column 4 lines 29-40 and column 5 lines 18-20). The decoder box also includes a "selecting device" (See Fig. 1b element 207a) that inherently allows the user "to provide a selecting signal...selecting a decompressing signal from the compressed program signals in the storage device" (See column 4 lines 40-46). Once a film is selected, the compressed signal or "decompressing signal" is sent to a decoder or "second signal processor" (See Fig. 1b element 202) that "decompresses the decompressing signal

into a broadcasting signal according to a decompressing format, and transmitting the broadcasting signals to a media device, thereby broadcasting the broadcasting signals" (See Fig. 1b elements 201, 202, 203, 208, and 300; column 4 lines 58-67). Furthermore, Gudesen discloses a traffic controller or "first signal processor" that receives signals and controls all the components of the decoder box (See Fig. 1b element 206). However, Gudesen does not disclose that the traffic controller receives "analog signals" and "transfers the analog program signals into digital program signals, and then compresses the digital program signals into compressed program signals according to a compressing format".

Lang discloses an audio/video transceiver that is able to record programs. The transceiver converts a received analog signal into a digital signal using an analog to digital converter (ADC) and then uses a compressor to compress the signal before storing in the memory or "transfers the analog program signals into digital program signals, and then compresses the digital program signals into compressed program signals according to a compressing format" (See Fig. 2; column 4 lines 19-27, column 7 lines 1-28, column 9 lines 9-15). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the traffic controller of the decoder box disclosed by Gudesen to include an ADC and a compressor that "transfers the analog program signals into digital program signals, and then compresses the digital program signals into compressed program signals according to a compressing format", as taught by Lang, in order to expand the compatibility and

capabilities of the decoder box thereby enabling it to receive analog signal and to increase the efficiency of the storage unit thereby increasing storage space.

Regarding claim 2, the traffic controller of the decoder box also serves as a "control unit" which inherently sends out a "first control signal" to the storage unit and the decoder (See Gudesen Fig. 1b elements 201, 202, and 206). Inherently, when the decoder box is storing films, the "first control signal" would instruct the storage unit to "start storing the compressed program" and for the decoder to be idle in order to successfully write the program within the storage unit.

Regarding claim 3, the films are also considered a "transmission signal", where inherently the traffic controller would send out a "first control signal" when the traffic controller detects the "transmission signal" in order to successfully store the transmitted films (See Gudesen column 1 lines 47-52).

Regarding claim 4, the storage unit or "storage device comprises a disk device" (See Gudesen column 4 lines 29-33 and column 6 lines 45-55).

Regarding claim 5, the storage unit is also writable or erasable where inherently existing data may be overwritten in order to maximize storage space (See Gudesen column 6 lines 45-46).

Regarding claim 6, Gudesen in view of Lang does not disclose that "the compressing format includes an encryption rule, and the decompressing format includes a decryption rule corresponding to the encryption rule".

Gudesen does disclose that encryption may be used while encoding the signals and a means to undo the encryption (See Gudesen column 4 lines 39-40 and column 5

lines 40-50). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the traffic controller and decoder disclosed by Gudesen in view of Lang to include an "encryption rule" while compressing the signals and for the decoder to receive a "decryption rule corresponding to the encryption rule" in order to successfully decrypt the signal, so that the stored programs are protected against fraud and various forms of illegal exploitation.

Regarding claim 7, Gudesen in view of Lang does not disclose that the playback device is a "digital TV" (See Gudesen Fig. 1b element 300).

Official Notice is taken that the use of digital TVs are well known. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the playback device disclosed by Gudesen in view of Lang to include a digital TV in order to successfully present the digital TV signals provided by the decoder box thereby allowing the user to enjoy a high quality presentation of the signals.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gudesen (5,761,607) in view of Lang (4,963,995) as applied to claims 1-7 above, and further in view of Yurt et al. (US006002720A).

Gudesen in view of Lang does not disclose that the decoder includes a "D/A converter, which is provided to convert the broadcasting signals into analog signals, and the media device is an analog TV".

Yurt et al. (Yurt) discloses a video transmission and receiving system where the receiving system includes converters that convert digital signals into analog signals and inherently provides the analog signals to an analog TV (See Fig. 6; column 17 lines 25-48). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the decoder and playback device disclosed by Gudesen in view of Lang to include a D/A converter that "converts the broadcasting signals into analog signals" and provide it to an analog TV, as taught by Yurt, in order to expand the compatibility and capabilities of the decoder box thereby allowing the user to enjoy the presentation of the signals on older equipment.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gudesen (5,761,607) in view of Lang (4,963,995) as applied to claims 1-7 above, and further in view of Gruse et al. (US006173112B1).

Gudesen in view of Lang does not disclose a "stop-transmission signal, whereby the control device essentially stops sending out the first control signal as the first signal processor receives the stop-transmission signal".

Gruse et al. (Gruse) discloses a system for storing programs. Gruse discloses that signal from the network or "input signals" includes a trailer that indicates the end of transmission or "stop-transmission signal". When the receiver detects the end-of-program indicator, the system stops storing where inherently the "control device essentially stops sending out the first control signal as the first signal processor receives the stop-transmission signal" (See Fig. 3 and 5; column 2 line 45 – column 3 line 4).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the input signals received by the decoder box and the traffic controller disclosed by Gudesen in view of Lang to include a "stop-transmission signal" and for the traffic controller to "stops sending out the first control signal as the first signal processor receives the stop-transmission signal", as taught by Gruse, in order notify the decoder box when to stop storing the films thereby decreasing the processing load of the traffic controller.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gudesen (5,761,607) in view of Lang (4,963,995) as applied to claims 1-7 above, and further in view of Marsh et al. (US006208799B1).

Gudesen in view of Lang does not disclose a "a timer device, which is used to clock a transmission time" and a "transmission-time signal, which indicates a predetermined time" where "the timer device starts clocking the transmission time as the control device starts sending out the first control signal, and the control device stops sending out the first control signal as the transmission time reaches the predetermined time".

Marsh et al. (Marsh) discloses an automatic timeslot adjustment method for a set-top-box used for storing programs. The set-top box receives IPG data or "transmission-time signals" that includes start times and time-slots or "predetermined times" for the programs. The set-top-box further includes record-timers or "timers" that inherently are used to clock the record time or "transmission time" as the system starts

recording or "as the control device start sending out the first control signal" and stops recording or "stops sending out the first control signal" when the timers reach the end of the time-slot or "as the transmission time reaches the predetermined time" (See column 3 line 46 – column 4 line 5; column 10 lines 35-60). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the input signals and decoder box disclosed by Gudesen in view of Lang to include IPG data or "transmission-time signals" and "timers" so that the "the timer device starts clocking the transmission time as the control device starts sending out the first control signal, and the control device stops sending out the first control signal as the transmission time reaches the predetermined time", as taught by Marsh, in order to enable the decoder box to receive films while being unattended by the user thereby increasing the convenience to the user.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please take note of Krause et al. (US006304714B1) for their similar method of local storage and encryption.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph G Ustaris whose telephone number is 703-305-0377. The examiner can normally be reached on M-F 7:30-5PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew I Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JGU
August 27, 2004

VIVEK SRIVASTAVA
PRIMARY EXAMINER